EMERGENCY SERVICES DIVISION BROOKHAVEN NATIONAL LABORATORY	Procedure No: FR-SFTY-8.0.6 Revision No: 1 Page 1 of 6

Title: High Risk Training

1.0 PURPOSE:

1.1 The Brookhaven National Laboratory Fire/Rescue Group recognizes the potential exposure of its firefighters in the performance of their duties, to the risks associated with training activities that are inherently high risk. To minimize the risks associated with this type of training, the Fire/Rescue Group will take the necessary measures, in accordance with the elements of this procedure, to minimize the possibility of firefighter injury during a training exercise.

The duties encompassed by modern firefighters are continually evolving. As with all new duties, there is an ongoing training and education process that must take place to ensure familiarization with the processes involved in the new skills. However, the benefits derived from this training may be negated by firefighter injury or death due to mistakes based on lack of competency in these new skills. The intent of this high risk training procedure is to ensure firefighter safety by ensuring review and understanding of the training and tasks beforehand. To that end, the procedure of evaluating high risk training shall include review by the Safety Officer, Fire Chief (or designee) and other officers in charge. Such training shall include set objectives, a written training plan, and written safety review.

1.1.1 The purpose of this procedure is to provide guidance to the Fire/Rescue Group regarding high risk training and the prudent actions that should be taken to prepare for such a training.

1.1.2 This procedure is intended to cover high risk training, but is not limited to such.

1.1.3 This procedure shall be deemed to cover external agencies, as well as internal ones.

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2.0 RESPONSIBILITIES

2.1 The Fire Chief has the overall responsibility for the Fire/Rescue Group, and the implementation of this procedure.

2.2 The Duty Fire Captain shall ensure that this procedure is followed.

2.3 All firefighters have the responsibility to report to the Duty Captain any problems that are encountered in the implementation of this procedure.

2.4 The Fire/Rescue Safety Officer has the responsibility for safe operations on the fireground or on the training ground, and for reporting unsafe conditions or operations to the officer in charge.

2.5 The Fire/Rescue Safety Officer may also unilaterally terminate any situation or action deemed unsafe (Stop Work Authority).

3.0 DEFINITIONS:

3.1 Risk: A factor, course, or element involving uncertain danger or hazard.

3.2 High Risk: A risk situation in which the probability of occurrence and injury is high.

3.3 High Risk Training: Any training exercise in which a high risk of injury exists. High risk training shall include, but not be limited to the following: live fire training, confined space training, high angle rescue, elevated platform or height operations, roof operations, elevator rescue, collapse operations, rope operations, helicopter operations, training with stored energy systems, and those with a high degree of physical exertion.

3.4 Training such as search and rescue, ventilation, forcible entry, portable ladders, one story roof operations, shall not (in general) be considered high risk

4.0 PREREQUISITES:

None

5.0 PRECAUTIONS:

None

6.0 PROCEDURE:

6.1 Pre-Training Procedures:

6.1.1 Identify the required training

6.1.2 Classify the training as to its risk potential. If the training meets the criteria stated in the definitions section, it should be considered high risk and this procedure shall be followed. Other training will be considered on a case-by-case basis.

6.1.3 Develop a written lesson plan for the training.

6.1.4 Distribute the lesson plan for review. Review of high risk training lesson plans and exercises shall be performed by the Fire Chief or his designee, the Safety Officer , and any other person deemed competent in the field of expertise.

6.1.5 Further review of the lesson plan and training exercise may be required by those competent in the field of expertise. This shall be determined during the above review.

6.1.6 The Safety Officer shall write a safety evaluation for the physical portion of the training exercise.

6.2 Training Procedures:

6.2.1 Prior to starting the complete hands-on evolution of the training exercise, the instructor shall ensure competency of the student either by demonstration or by written exam.

6.2.2 Prior to the start of the evolution, the site shall be inspected for hazards by the Fire Chief or his designee, the Safety Officer, and/or any specialist deemed as necessary by the Fire Chief or his designee. All hazards shall be identified and noted. Training should not commence without approval from this person.

6.2.3 Hazards should be mitigated to the extent possible. Methods to be used are removal of hazard (such as removing objects from the area), avoidance of hazard (such as changing the location of the evolution), minimization of the hazard (such as purging a confined space with fresh air or installation of mats for fall protection), or by general awareness of the hazard (such as the tour of the location prior to the start of the evolution). One or more of these methods shall be acceptable.

6.2.4 The results of the hazard analysis/inspection shall be discussed with the trainees (firefighters) as part of a safety briefing prior to the exercise.

6.2.5 There shall be a designated Officer-in-Charge (OIC) for the training exercise. This shall be announced to all participants prior to the start of the evolution. The OIC shall point out the hazards involved with the training.

6.2.6 Due to the nature of the training evolution, the instructor should impart a sense of professional decorum to eliminate the potential for injury due to lack of attention to detail and any subsequent personnel errors.

6.2.7 The personnel participating in the high risk training also have a great responsibility for safety. Any questions or concerns should be brought immediately to the instructor, officer in charge, or safety officer.

6.2.8 All training participants and management have stop work authorization as per existing laboratory procedures.

6.2.9 Under no circumstances shall one person alone practice or perform high risk training exercises.

7.0 IMPLEMENTATION AND TRAINING

7.1 Training shall be documented in accordance with BTMO.

8.0 REFERENCES

8.1 Laboratory Stop Work Procedure – https://sbms.bnl.gov/ld/ld18d011.htm

9.0 ATTACHMENTS

9.1 Hazard Identification Checklist

ATTACHMENT 1

Hazard Identification Checklist

HAZARD IDENTIFICATION QUESTIONS	YES	NO
1) Does the space contain or potentially contain a hazardous atmosphere?	____	____
2) Does the space contain any chemicals or chemical residue?	____	____
3) Does the space contain any flammable/combustible substances?	____	____
4) Does the space contain or potentially contain any decomposing organic matter?	____	____
5) Does the space have any pipes which bring chemicals into it?	____	____
6) Does the space have any materials that can trap or potentially trap, engulf, or drown an entrant?	____	____
7) Is vision obscured by dust at 5 feet or less?	____	____
8) Does the space contain any mechanical equipment?	____	____
9) Does the space have converging walls, sloped or tapered floors to smaller cross-sections which could trap or asphyxiate an entrant (Entrapment Hazard)?	____	____
10) Does the tank or vessel contain rusted interior surfaces?	____	____
11) Does the space contain thermal hazards (e.g., extremely hot or cold)?	____	____
12) Does the space contain excessive noise levels which could interfere with communication with an attendant?	____	____
13) Does the space present any slip, trip, or fall hazards?	____	____
14) Are there any operations conducted near the space opening which could present a hazard to entrants?	____	____
15) Are there any hazards from falling objects?	____	____
16) Are there lines under pressure servicing the space?	____	____
17) Are cleaning solvents or paints going to be used in the space?	____	____
18) Is welding, cutting, brazing, riveting, scraping, or sanding going to be performed in the space?	____	____
19) Is electrical equipment located in or required to be used in the space?	____	____

	YES	NO
20) Does the space have poor natural ventilation which would allow an atmospheric hazard to develop?	____	____
21) Are there any corrosives which could irritate the eyes in the space?	____	____
22) Are there any conditions which could prevent any entrants' self-rescue from the space?	____	____
23) Are there any substances used in the space which have acute hazards?	____	____
24) Is mechanical ventilation needed to maintain a safe environment?	____	____
25) Is air monitoring necessary to ensure the space is safe for entry due to potential hazardous atmosphere?	____	____
26) Will entry be made into a diked area where the dike is 5 feet or more in height?	____	____
27) Are residues going to be scraped off the interior surfaces of the vessel?	____	____
28) Are non-sparking tools required to remove residues?	____	____
29) Does the space restrict mobility to the extent that it could trap an entrant?	____	____
30) Is respiratory protection required because of a hazardous atmosphere?	____	____
31) Does the space present a hazard other than those noted above which would make it a permit space?	____	____